

Claims

What is claimed is:

1. 1. A method of operating an information handling system (IHS) comprising:
2. sensing whether the IHS is drawing power from a DC power source or an AC
3. power source;
4. interrupting current to an external module of the IHS if, when the IHS is
5. drawing power from a DC power source, the current to the external
6. module exceeds a first current limit; and
7. interrupting current to the external module if, when the IHS is drawing power
8. from an AC power source, the current to the external module exceeds
9. a second current limit.
1. 2. The method of claim 1 wherein the DC power source is a battery.
1. 3. The method of claim 1 wherein the AC power source is an AC adaptor.
1. 4. The method of claim 1 wherein the external module is a media drive.
1. 5. The method of claim 1 including initializing the IHS prior to sensing whether
2. the IHS is drawing power from a DC power source or an AC power source.
1. 6. The method of claim 5 including supplying current to a cut-off switch which is
2. connected to the external module.
1. 7. The method of claim 6 including closing the cut-off switch upon initializing the
2. IHS to supply current to the external module.

- 1 8. The method of claim 6 wherein the cut-off switch is a power FET.
- 1 9. The method of claim 6 including opening the cut-off switch when the current
2 to the external module is provided by a DC battery source and the current to
3 the external module exceeds the first current limit.
- 1 10. The method of claim 6 including opening the cut-off switch when the current
2 to the external module is provided by an AC power source and the current to
3 the external module exceeds the second current limit.
- 1 11. An information handling system (IHS) comprising:
2 a main subsystem including a processor and a memory coupled to the
3 processor;
4 an external module; and
5 a power subsystem, coupled to the main subsystem and the external module,
6 for supplying DC current to the main subsystem and the external
7 module, the power subsystem interrupting DC current to the external
8 module if, when the IHS is drawing power from a DC power source,
9 the current to the external module exceeds a first current limit; and
10 also interrupting DC current to the external module if, when the IHS is
11 drawing power from an AC power source, the current to the external
12 module exceeds a second current limit.
- 1 12. The IHS of claim 11 wherein the power subsystem includes a cut-off switch
2 which is coupled to the external module to supply current to the external
3 module and to interrupt current to the external module.
- 1 13. The IHS of claim 12 wherein the cut-off switch is a power FET.

- 1 14. The IHS of claim 11 wherein the power subsystem includes a power
2 management controller which determines if the IHS is being powered by a
3 DC power source or an AC power source.
- 1 15. The IHS of claim 11 wherein the DC current is unregulated.
- 1 16. The IHS of claim 12 wherein the power subsystem includes a multiple
2 threshold current protection circuit, coupled to the cut-off switch, for
3 interrupting DC current to the external module if, when the IHS is drawing
4 power from a DC power source, the current to the external module exceeds a
5 first current limit; and also interrupting DC current to the external module if,
6 when the IHS is drawing power from an AC power source, the current to the
7 external module exceeds a second current limit.
- 1 17. The IHS of claim 16 wherein the power subsystem includes a power
2 management controller which determines if the IHS is being powered by a
3 DC power source or an AC power source.
- 1 18. The IHS of claim 17 wherein the power subsystem generates a fault flag if
2 when the IHS is drawing power from a DC power source, the current to the
3 external module exceeds a first current limit and if when the IHS is drawing
4 power from an AC power source, the current to the external module exceeds
5 a second current limit.
- 1 19. The IHS of claim 18 wherein the fault flag is provided to the power
2 management controller.

- 1 20. The IHS of claim 19 wherein the multiple threshold protection circuit includes
- 2 a sensor in series with the cut-off switch and the external module to sense
- 3 the current supplied to the external module by the power subsystem.